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|----------------------------------------------|------------------------|----------------------------------------|---|
| From: David S. Resnick Candace Summerford | Date: December 7, 2006 | No. of Pages: (including this page) | 3 |
|----------------------------------------------|------------------------|----------------------------------------|---|

Atty. Docket No.700355-053462

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

| | | | |
|-------------|----------------------------------------|-----------|------------------|
| Applicant: | David Kaplan et al. | Examiner: | Not Yet Assigned |
| Serial No.: | 10/541,182 | Group: | 3926 |
| Filed: | June 14, 2006 | | |
| For: | SILK FIBROIN MATERIALS AND USE THEREOF | | |

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Stephanie M. Mannino

Dec 7, 2006

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Atty. Docket No. 700355-053462

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: David Kaplan et al. Examiner: Not Yet Assigned
Serial No.: 10/541,182 Group: 3926
Filed: June 14, 2006
For: SILK FIBROIN MATERIALS AND USE THEREOF

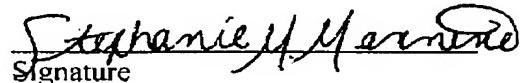
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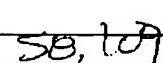
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|------------------------------------------------------------------------------------------------|--|------------------------|---------------------|
| TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i> | | Application Number | 10/541,182 |
| | | Filing Date | June 14, 2006 |
| | | First Named Inventor | David Kaplan et al. |
| | | Group Art Unit | 3926 |
| | | Examiner Name | Not Yet Assigned |
| Total Number of Pages in This Submission | | Attorney Docket Number | 700355-053462 |

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| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | | |
| Firm or Individual name | NIXON PEABODY LLP 100 Summer Street Boston, MA 02110-2131 | |
| Signature |   David S. Resnick (Reg. No. 34,235) / Candace M. Summerford (Reg. No. 58,109) | |
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Practitioner's Docket No. 700355-053462

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: David Kaplan et al.
Confirmation No.: 6154
Application No.: 10/541,182 Group No.: 3926
Filed: June 14, 2006 Examiner: To be assigned
For: SILK FIBROIN MATERIALS AND USE THEREOF

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REQUEST FOR CORRECTED FILING RECEIPT – PTO ERROR

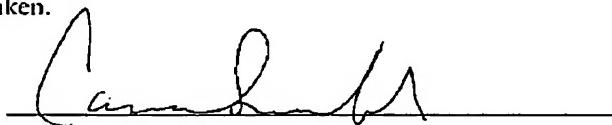
- Attached is a copy of the official filing receipt received from the PTO in the above application for which issuance of a corrected filing receipt is respectfully requested.
- There are errors with respect to the following, which are incorrectly entered.

| <i>Error in</i> | <i>Correct data</i> |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------|
| i) Title of the Application | i.) SILK FIBROIN MATERIALS AND USE THEREOF |
| ii) Assignment For Published Patent Application – MIT is the only Assignee listed | ii.) "Tufts University, Medford, MA" should also be added |

Applicants' attach hereto a copy of the filing receipt with corrections marked.

- Applicants note that the correct information for both the Title of the Application and the Assignment for Published Patent Application were both correct when filing the PCT application (cover sheet of WO 2004/062697 A2 enclosed herewith). Both are also correct on the Application Data Sheet when the National Phase Entry was filed.
- Applicants do not believe any fees are associated with this submission. Authorization to charge fee deficiencies and credit overpayment to the NIXON PEABODY LLP Deposit Account No. 50-0850 is given in the event that Applicants are mistaken.

Date: December 7, 2006



David S. Resnick (Reg. No.: 34,235)
Candace M. Summerford (Reg. No. 58,109)
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(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
29 July 2004 (29.07.2004)

PCT

(10) International Publication Number
WO 2004/062697 A2

(51) International Patent Classification?: **A61L**

(21) International Application Number:
PCT/US2004/000255

(22) International Filing Date: 7 January 2004 (07.01.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/438,393 7 January 2003 (07.01.2003) US

(71) Applicants (for all designated States except US): **TUFTS UNIVERSITY [US/US]; Ballou Hall, Medford, MA 02155 (US). MASSACHUSETTS INSTITUTE OF TECHNOLOGY [US/US]; 77 Massachusetts Avenue, Cambridge, MA 02139 (US).**

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KAPLAN, David,**

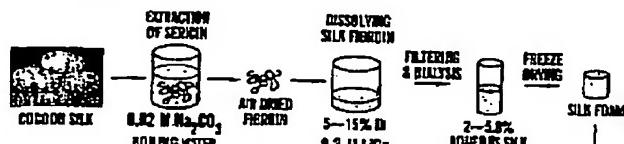
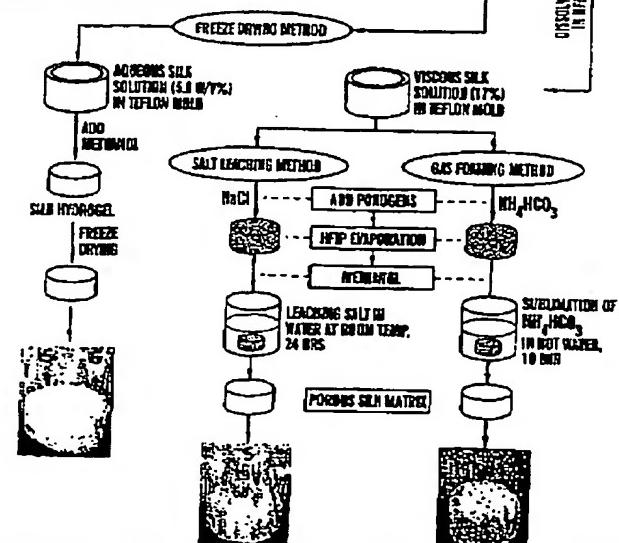
L. [US/US]: 46 Pond Street, Concord, MA 01742 (US). NAZAROV, Rina [US/US]: 24 Princeton Street, Medford, MA 02155 (US). VUNJAK-NOVAKOVIC, Gordana [US/US]: 305 Fitzmaurice Circle, Belmont, MA 02478 (US). MEJNEL, Lorenz [DE/CH]: Kastanienstrasse 6, 34266 Niestetal (DE).

(74) Agents: **RESNICK, David, S. et al. Nixon Peabody LLP, 101 Federal Street, Boston, MA 02110 (US).**

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: **SILK FIBROIN MATERIALS AND USE THEREOF**

A. SILK PROCESSING**B. SILK SCAFFOLD FABRICATION**

(57) Abstract: The present invention provides processes for producing porous silk fibroin scaffold material. The porous silk fibroin scaffold can be used for tissue engineering. The porosity of the silk fibroin scaffolds described herein can be adjusted as to mimic the gradient of densities found in natural tissue. Accordingly, methods for engineering of 3-dimensional tissue, e.g. bone and cartilage, using the silk fibroin scaffold material are also provided.

WO 2004/062697 A2

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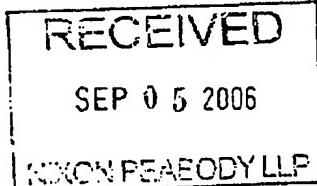


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| APPL NO. | FILING OR 371 (c) DATE | ART UNIT | FIL FEE RECD | ATTY.DOCKET NO | DRAWINGS | TOT CLMS | IND CLMS |
|------------|---------------------------|----------|--------------|----------------|----------|----------|----------|
| 10/541,182 | 06/14/2006 | 3926 | 740 | 700355-053462 | 16 | 39 | 1 |

50828
DAVID S. RESNICK
100 SUMMER STREET
NIXON PEABODY LLP
BOSTON, MA 02110-2131



CONFIRMATION NO. 6154

FILING RECEIPT



"OC0000000020220880"

Date Mailed: 08/29/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

✓ David L Kaplan, Concord, MA;
✓ Rina Nazarov, Medford, MA;
✓ Gordana Vunjak-Novakovic, Belmont, MA;
✓ Lorenz Meinel, Niestetal, GERMANY;

Assignment For Published Patent Application

Massachusetts Institute of Technology, Cambridge, MA
Tufts University, Medford, MA

Power of Attorney: The patent practitioners associated with Customer Number 50828.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/US04/00255 01/07/2004
which claims benefit of 60/438,393 01/07/2003 ✓

Foreign Applications

If Required, Foreign Filing License Granted: 08/28/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US10/541,182

Projected Publication Date: 12/07/2006

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

~~Electrospun pharmaceutical compositions~~
Silk Fibroin Materials and Use Thereof

Preliminary Class

348

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